



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,912	01/22/2004	Stuart T. Linsky	20T-029-CON	6147

23400 7590 06/08/2007
POSZ LAW GROUP, PLC
12040 SOUTH LAKES DRIVE
SUITE 101
RESTON, VA 20191

EXAMINER

HOM, SHICK C

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/762,912	Applicant(s) LINSKY ET AL.	
	Examiner Shick C. Hom	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/22/04, 6/17/04, 10/14/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/22/04, 10/14/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2616

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract is too long and the numbers in parenthesis must be deleted. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 21-28 are objected to because of the following informalities: In claim 21 lines 3 and 13, the words "a downlink" seem to refer back to said "satellite downlink" recited in claim 21 line 1. If this is true, it is suggested

Art Unit: 2616

changing "a downlink" to ---said downlink---. Claims 22-28 are objected to because they depend from objected claim 21.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 21-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 21 lines 18 and 20 which recite "said latency time" lack clear antecedent basis because no latency time have been previously recited in the claim and therefore the limitation is not clearly understood; further it is not clear as to whether it is reciting ---said latency threshold--- of claim 21 line 10. Claims 22-28 are rejected under 35 U.S.C. 112, second paragraph because they depend from rejected claim 21.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

Art Unit: 2616

the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallinckrodt (5,995,832) in view of Ickikawa (6,301,253).

Mallinckrodt discloses a method for reducing power consumption in a satellite downlink transmitter (col. 3 lines 21-34 recite the need to conserve downlink power in a satellite communications system), the method comprising:

Art Unit: 2616

defining a frame structure including a traffic body and an overhead body (col. 9 lines 23-41 recite the signal being in a frame structure);

determining a traffic transmit time and an overhead transmit time for each frame; storing synchronization information in said overhead body (col. 4 lines 45-65 recite providing a timing signal to the user unit which clearly anticipate the synchronization information and Fig. 11 shows the transmit time slots of the satellite which clearly anticipate determining a traffic and overhead transmit time);

queueing traffic information for transmission on a satellite, wherein said queued traffic is transmittable by said satellite (col. 9 lines 23-41 recite the transmit buffer);

establishing a latency threshold which determines the maximum time for which any portion of traffic information remains queued on said satellite without transmission; determining whether said latency threshold has been exceeded (col. 14 line 54 to col. 15 line 5 recite the use of a signal quality monitor which compares past error rate statistics, i.e. transmit time delay, against prescribed maximum time delay acceptable clearly anticipate establishing and determining whether a latency threshold has been exceeded); and

Art Unit: 2616

continuously transmitting information in a downlink according to the following sub-steps: activating a satellite transmitter for said overhead transmit time and transmitting said overhead body including said synchronization information (col. 14 lines 19-46 recite continually maintaining a transmitted signal); including the step of

storing null information in any traffic body that is only partially filled with queued traffic information at the time of transmission (col. 9 lines 23-41 recite transmission before the buffer fills).

Mallinckrodt discloses all the subject matter of the claimed invention with the exception of immediately transmitting, if said latency time has been exceeded, said traffic body for said traffic time; and deactivating, if said latency time has not been exceeded, said transmitter for said traffic transmit time; and wherein the said queueing step queues traffic information in units of 53 bytes ATM cells.

Ichikawa from the same or similar fields of endeavor teach that it is known to provide the step of immediately transmitting, if said latency time has been exceeded, said traffic body for said traffic time; and deactivating, if said latency time has not been exceeded, said transmitter for said traffic transmit time (col. 7 lines 41-62 recite providing

Art Unit: 2616

control for reading cells from queues such that a threshold value is used to upgrade the queue to a higher delay quality class and when no cell is accumulated in the queue the delay quality class values are decreased reads on transmitting traffic if latency time has been exceeded and deactivating if time has not been exceeded as claimed); and wherein the said queueing step queues traffic information in units of 53 bytes ATM cells (the abstract recite the information being ATM cells).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the step of immediately transmitting, if said latency time has been exceeded, said traffic body for said traffic time; and deactivating, if said latency time has not been exceeded, said transmitter for said traffic transmit time; and wherein the said queueing step queues traffic information in units of 53 bytes ATM cells as taught by Ichikawa in the communications system of Mallinckrodt.

The step of immediately transmitting, if said latency time has been exceeded, said traffic body for said traffic time; and deactivating, if said latency time has not been exceeded, said transmitter for said traffic transmit time; and wherein the said queueing step queues traffic information in units of 53 bytes

Art Unit: 2616

ATM cells can be implemented by providing this step and use of ATM cell of Ichikawa in the method of Mallinckrodt.

The motivation for providing the step of immediately transmitting, if said latency time has been exceeded, said traffic body for said traffic time; and deactivating, if said latency time has not been exceeded, said transmitter for said traffic transmit time; and wherein the said queueing step queues traffic information in units of 53 bytes ATM cells as taught by Ichikawa in the communication system of Mallinckrodt being that it provides more efficiency for the system since the system can transmit cells from one queue without exceeding delay while servicing queues at the transmitting end.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smith et al. disclose packet concatenation for increased transmission capacity.

Wright et al. disclose adaptive coding scheme for a processing communications satellite.

Montpetit discloses priority-based bandwidth allocation and bandwidth-on-demand in a low-earth-orbit satellite data communication network.

Art Unit: 2616

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pham Chi can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/762,912

Page 10

Art Unit: 2616

SH

SH



CHI PHAM
SUPERVISORY PATENT EXAMINER

6/5/08